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Using iCoaching to support teachers' implementation of evidence-based practices

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Coaching in the school setting typically follows a teacher observation by an administrator or coach. Feedback is often delayed and does not allow for immediate error correction. Traditional professional development in schools is often a one-day passive receipt of content or strategies, with no time to practice, implement, or follow-up on the strategy to ensure implementation with fidelity. Combining strategies learned in professional development with iCoaching provides teachers with support to implement evidence-based strategies in their own classrooms with fidelity, and bridges the gap between professional development and implementation. This article discusses how to use iCoaching to support strategy implementation for in-service teachers.

Keywords: evidence-based practices, iCoaching, teacher coaching

iCoaching (Randolph, Duffy, Brady, Wilson, & Scheeler, 2019) is a version of bug-in-ear (BIE) coaching using iPods, Bluetooth earpieces, and the FaceTime application, where the coach provides a prompt to remind the teacher to deliver the desired behavior. For example, in a previous study, iCoaching (Randolph et al., 2019) was used to increase teacher-delivered opportunities to respond for students with disabilities during whole group instruction, and can be expanded to additional teaching and classroom management strategies. Previous BIE coaching studies (e.g., Scheeler & Lee, 2002; Scheeler, McKinnon, & Stout, 2012) provided immediate feedback and allowed for error correction as teachers were conducting lessons rather than allowing teachers to make errors and providing them feedback after the fact with no opportunity for error correction. iCoaching, like BIE coaching, helps teachers transfer strategies learned in professional development to their classrooms with coaching support while they are implementing the strategy, which allows for error correction and bridges the gap to ensure appropriate implementation.

Teacher Coaching

Traditional teacher coaching is provided within the context of the school day, and is commonly embedded within a teacher evaluation system (Kretlow & Bartholomew, 2010). Principals or supervisors observe teachers, score them on a rubric, then provide the feedback, which is often delayed for periods of time because it revolves around the principal and teacher schedules that do not align. The traditional observational coaching done in schools does not provide the opportunity to make changes and correct errors if they occur. Figure 1 illustrates the traditional teacher coaching evaluative model in schools today.

Figure 1. *Traditional observation and coaching model*

Change within any professional environment is difficult and requires different layers of training and support to achieve and maintain. Achieving a change for teachers requires several levels of training and support, including PD, coaching, and implementation. For a teacher to embrace a new strategy learned through PD, buy-in is required on the teacher's part, which shows that the strategy being learned has a positive impact on students academically, behaviorally, or both (Guskey, 2002). In fact, improving student performance should be considered the *gold standard* in making effective instructional decisions (Greenwood & Maheady, 1997).

Traditional in-service teacher PD typically includes passive participation and lecture, lacks a personal focus, and provides no generalization, maintenance strategies, or follow-up. District personnel or supervisors are in charge of the PD process, and provide more of a *how to* do something, rather than engaging the teachers in learning and practicing a skill (Sergiovanni & Starratt, 2007). Little coaching or follow-up is provided, and teachers typically do not implement the strategy if they do not have coaching or support.

Coaching can be integrated into the PD process to address the passive participation issues of traditional in-service presentations. Coaching identifies individual needs and concerns, provides a collaborative experience for those teachers, and enables ongoing support from peers (Thompson, Marchant, Anderson, Prater, & Gibb, 2012). Thompson et al. noted that the coaching process needs to be structured and recommended the following steps to structure the process: implement school-wide classroom management practices, use observational guides, conduct a pre-conference to determine targeted teaching skills, conduct a post-conference to analyze observational data, provide an intervention choice (modeling, observe others, etc.), set goals, and follow up.

Evidence-Based Practices

While all professions have customs and traditions that constitute *common practice or best practice*, not all common

practices have the evidence with efficacy that deem them *evidence-based practices*. Standards that establish evidence-based practices (EBPs) vary dramatically across research methods and disciplines. EBPs are the standard used to support, fund, and implement knowledge derived from specific scientific research. This includes the practices used for in-service and preservice teachers in special education (Horner et al., 2005; Kratochwill et al., 2013).

Evidence-based practices in special education are instructional strategies supported by a wealth of research paired with classroom applications that promote the learning and behavior of students with disabilities (Cook, Tankersley, & Harjusola-Webb, 2008). EBPs are typically content-focused and apply to students at varying developmental and ability levels. The hallmark of an EBP versus a customary teaching practice is that a preponderance of the research involving the practice indicates it is successful in meeting instructional goals when used with fidelity (Cook et al., 2008).

Much of the research on coaching and in teacher preparation involves experimental research using single subject designs, which focuses on implementing and evaluating interventions with individual participants. Rigorous standards of practice are applied to studies using single subject design (Horner et al., 2005; Kratochwill et al., 2013). Additionally, coaching studies using technology exist that are grounded in group design research methods (e.g., Rock et al., 2009; Rock et al., 2014). These studies apply traditional research methods in education and psychological research. Standards for establishing evidence-based practices using group research designs vary across disciplines (Chwalisz, 2003; Flay et al., 2005; & Rycroft-Malone et al., 2004). The standards to identify EBPs require high quality studies that meet specific criteria: (a) two studies using experimental or quasi-experimental group design; (b) five single subject research studies conducted by three separate investigators or groups of researchers; or (c) a combination of one group design experimental or quasi-experimental study and three or more single subject design studies conducted by three separate investigators or groups of researchers (NPDC, n.d.).

It is important for teachers and coaches to use EBPs because of the rigorous research support showing that they work to improve student academics and behavior; coaching should involve goal setting for both the coach and the teachers (Knight, 2009). The coach and teacher set a goal together, and then identify the specific teaching strategy that will help them reach the goal. Next, they track to ensure they have a mutual understanding of the targeted strategy, and the coach helps by explaining and modeling the targeted teaching strategy. Finally, progress towards the goal is monitored, and changes are made to ensure the goal is met, both for the teachers, and the impact that it has on students.

iCoaching in Schools

Prior to setting up a coaching session, five factors must be considered to implement iCoaching in schools (Randolph & Brady, 2018), which can be found in Figure 2. The five factors include (a) willing participants; (b) targeted teacher behavior; (c) coaching prompts; (d) iCoaching tools; and (e) conducting practice sessions. These factors are identified by both the teacher and coach at the beginning of the coaching process, and consistent throughout.

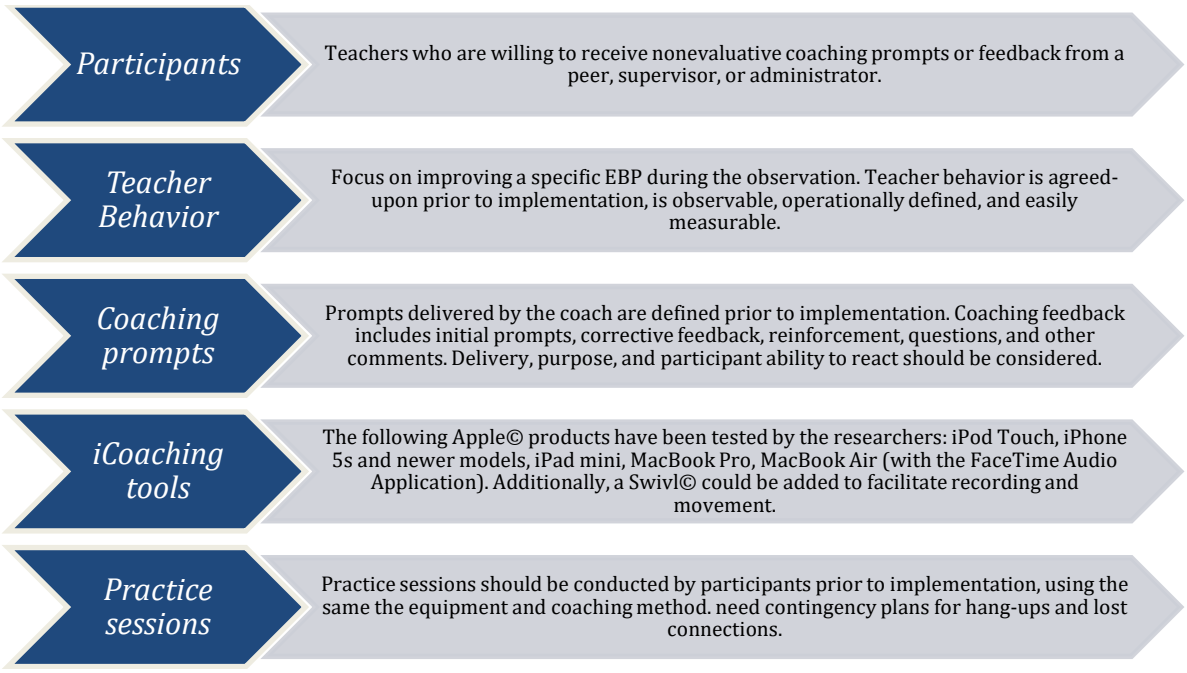

Figure 2. *Five factors to consider when implementing iCoaching in schools* (adapted from Randolph & Brady, 2018).

iCoaching starts with the coach (e.g., academic or behavior intervention coach) observing the teacher to obtain baseline data on their teacher. The teacher and coach are effectively a team, and should function as such during the iCoaching process. Next, the coach and the teacher set a goal, which includes the EBP that they choose to implement based on the coach's observations. The teacher and coach either attend a PD session based on the EBP, or complete an online training or module focused on the EBP (e.g., Ci3t.org or IRIS modules – iris.peabody.vanderbilt.edu). Once the teacher and coach acquire and demonstrate proficiency with the specific EBP, they should collaborate and decide on the coaching prompts that will be delivered from the coach to the teacher via Bluetooth earpiece. Scheeler & Lee (2002) indicated that short, concise prompts that are understood by both the coach and teacher work better than longer descriptive prompts. The teacher and coach should then practice with the equipment and create a backup plan for hang-ups and other potential disruptions to iCoaching sessions (e.g., student misbehavior, fire drills).

During iCoaching sessions, the coach should be in a different room to minimize disruptions within the teaching environment. The iPod (or iPad, iPhone) should be positioned where the coach has an optimal view of the teacher as they move around the classroom during the lesson. A *fish-eye* lens can be clipped on to the equipment to enhance the coach's view if necessary. The coach provides prompts to the teacher when the EBP needs to occur naturally in their lesson. Lessons should occur daily for no more than 15 minutes to allow the teacher to implement the strategy in the same class daily. Once the teacher has implemented the EBP with fidelity and to the predetermined level of proficiency, the coach should conduct maintenance sessions to ensure that the teacher is

continuing to implement the EBP with efficacy, and generalizes to other class times. This process is represented in Figure 3.

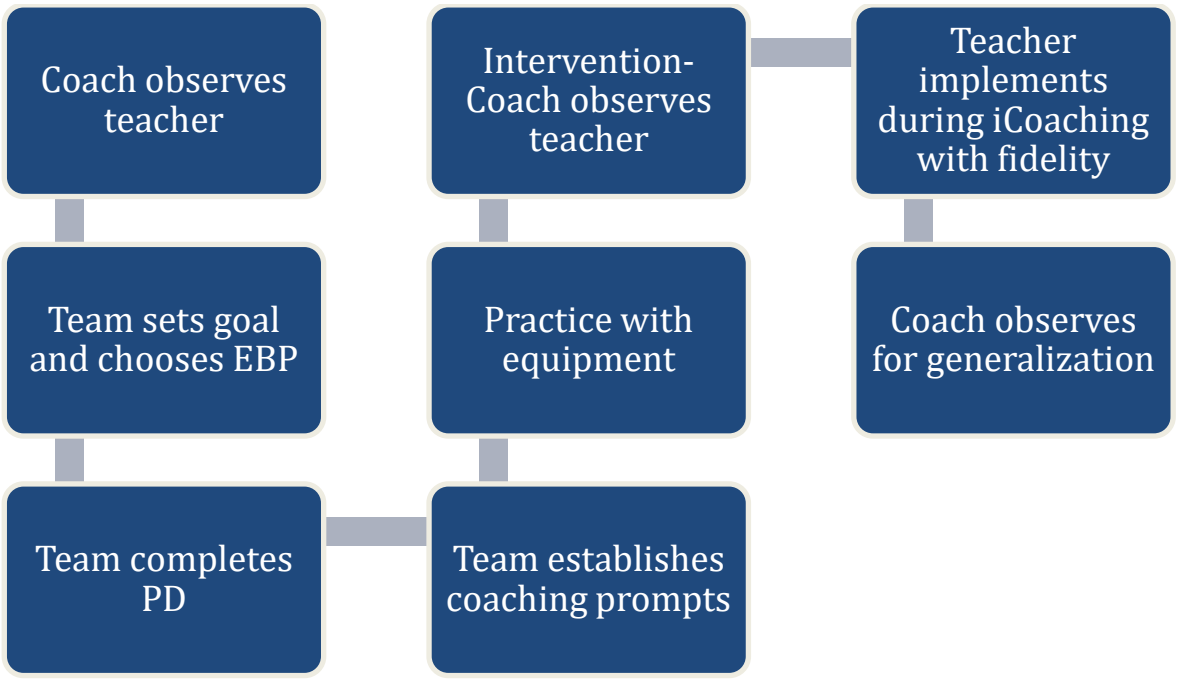

Figure 3. *iCoaching process*

iCoaching (Randolph et al., 2019) is an effective way to provide coaching to increase evidence-based teaching behaviors. Involving teachers from the beginning by providing them with choice and voice in the process will empower teachers to engage in the iCoaching process. The coach provides both support and connections in professional development, implementation, and eventually, generalization. Continuously improving technology enables teachers to receive real-time coaching comments and can be extended to other areas, including peer coaching, supervisory coaching, and remote coaching. iCoaching increases efficiency, removes geographic limitations and intrusiveness of traditional coaching, and promotes generalization of skills learned in PD into the classroom. The possibilities are endless for iCoaching in schools.

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